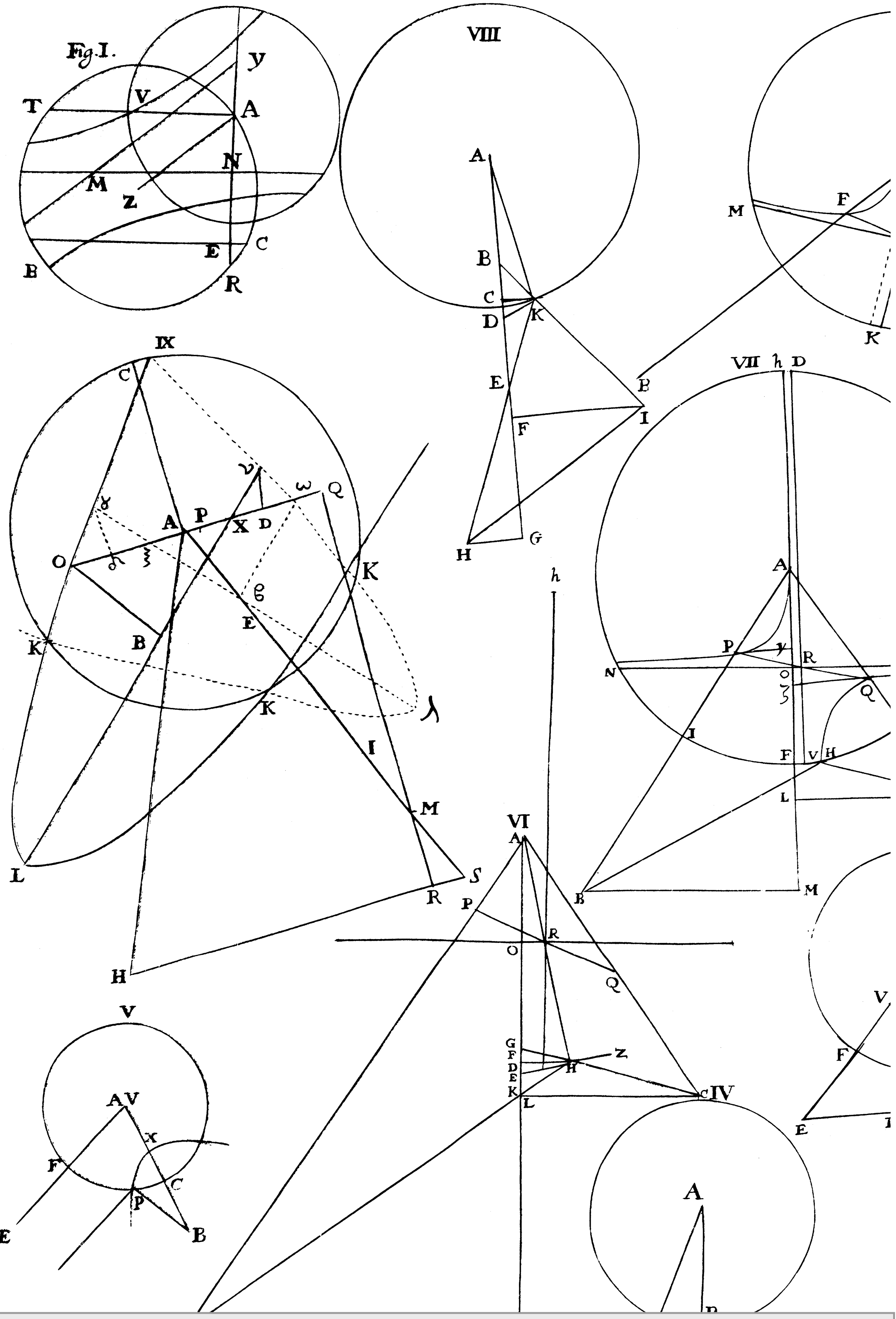

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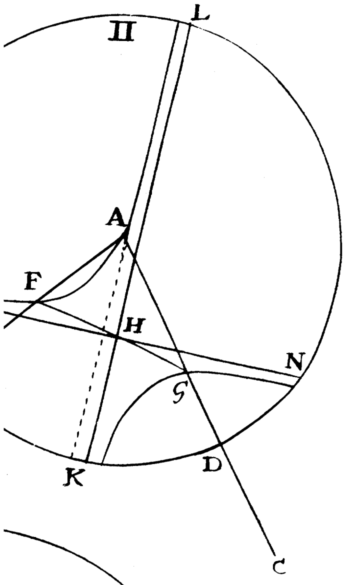
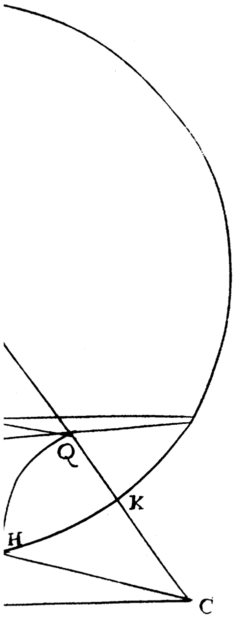
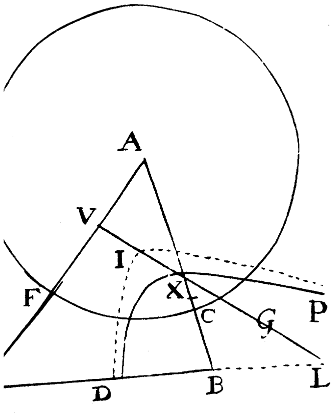
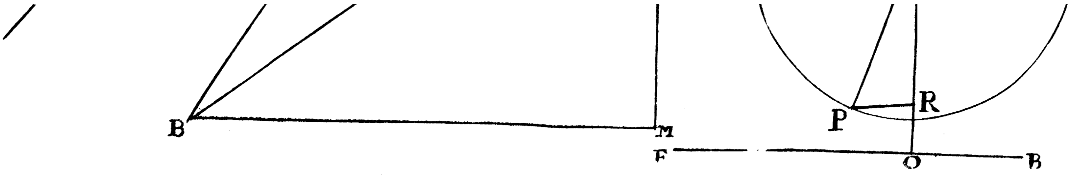
II





III




B
M
F
P
R
O
B

Tranſact. N° 98

Whilſt the Sea runneth from Weſt to Eaſt in Flowing, through this *Weſtra-Frith*, there are no greater Surges, than in any other place of the Sea; and in a calm day, it is as ſmooth as any Lake, though there is conſtantly a great current, in the flux and reflux of the Sea. Yet at the South-Eaſt end of the forementioned little Iſland, the Sea no ſooner begins to run weſtward in Ebbing, but there beginneth a ſurge to appear, which continually increaſeth, until the Ebb be half ſpent, and afterwards it decreaſeth, until it be low water; at which time there appeareth no ſuch thing. Eaſt and weſt from this great Surge, there are ſome few leſſer ſurges ſeen, which are gradually leſs, towards the eaſt and weſt, after this manner

I having occaſion to paſs that way, in a little boat, when we had paſſed over the Eaſtmoſt ſurges, and were beginning to aſcend the biggeſt, upon the tenth of *April*, at one of the clock in the afternoon, the ſurge before us was ſo high, that it intercepted the ſight of the Sun, and ſome deg. of the firmament above it. This ſurge is about a quarter of a mile in length. When there is any wind, which occaſioneth the breaking of the tops of the Surges, there is no paſſing that way. The current of the Tyde is ſo ſtrong there, that there is no need of Sails or of Oares, ſave only to direct the boat, as doth the helm.

Continuatio Excerptorum ex Epiſtolis Sluſianis & Hugenianis, *ſuper* Alhazeni *Problemate Optico, in Actis Philoſophicis proximè pragreſſis commemorato.*

DN. *Hugenius* ad noviſſimam Dn. *Sluſii*, p.6123. & ſeqq. Num. 97. editam, reſcripſit Editori, *Lutetiâ Pariſiorum* Apr. 9. 1672. in hanc ſententiam;

Eſt quod Tibi gratias agam, quòd non fuiſti gravatus Dn. Sluſii *ſuper problemate* Alhaziano *analyſin mihi tranſmittere. Eſt illa doctiſſima & Authore ſuo digniſſima; fuitque in cauſa, dum eam hiſce diebus examinarem, ut novis circa problema illud meditationibus me traderem, eò ſpectantibus, ut conſtructionem quàm poſſem compendioſiſſimam maximeque genuinam obtinerem; quam tandem me conſecutum eſſe reor. Eam hìc adſcribam, poſtquam Tibi compendium illud tradidero, quod eodem tempore inveni circa* primam, *ab initio tibi communicatam. Id autem tale eſt* *: *Ductâ lineâ A T, parallelâ C B, eaque biſectâ in V, punctum hoc eſt illud, per quod tranſire debet una hyperbolarum oppoſitarum, quarum aſymptoti inventæ fuerunt Y M, M N.*

* V. Fig I.

Sed en Tibi bonam illam conſtructionem, quæ in omnibus caſibus obtinet †. *Sit Circulus datus E D, cujus centrum eſt A; puncta data, B & C.*

† V. Fig II.

Ductis lineis A B, A C, fiant proportionales B A (radius circuli) & F A: Eodem modo C A, (radius circuli) & G A. Tum jungatur F G, eaque biſecetur in H; & per hoc punctum ducantur lineæ L H K, M H N, ſe invicem interſecantes ad angulos rectos, quarumque L H K ſit parallela ei, quæ biſecat angulum B A C. Hæ ſunt duæ Aſymptoti Hyperbolarum deſcribendarum per puncta F & G, & quarum una tranſibit etiam per centrum A, quarum interſectiones cum circuli

circuli peripheria notabunt puncta Reflexionis quæſita. Hucuſque Dn. Hugenius,

Quæ Dn. *Sluſius* ad hæc repoſuit trinis epiſtolis, ſic ſe habent;

1. *Quæ ad* Alhazeni *problema meditatus fui hactenus, rudia licèt & impolita, tui juris ſunt . De iis igitur diſpone prout lubet. Simpliciſſima eſt & maximè ingenioſa Nobiliſſimi* Hugenii *conſtructio. Vidit quippe Vir acutiſſimus, quâ ratione ad omnes caſus extendi poſſet* Hyperbola *æqualium laterum, quam in caſu anguli recti ſeſe ſtatim offerre præcedentibus meis inſinuaveram. Poſſet quoque ex infinitis* Ellipſibus, *quæ adhiberi poſſunt, una ſeligi non difficilis conſtructionis: ſed piget tamdiu in eodem Problemate hærere. Supereſt tamen aliquid, quod contemplationem habet non injucundam; nim. cùm ſectiones, quæ cum circulo dato ad Problematis ſolutionem adhibentur, illum in quatuor punctis ſecent, quorum duo tantùm reflexioni ſerviunt, quæri poſſet, quodnam Problema ſolvant duo reliqua, & quânam verborum formâ concipienda ſit Propoſitio, ut quatuor illos caſus complectatur. Deinde, annon etiam iidem quatuor caſus occurrant cum puncta data æqualiter diſtant à centro? Vale. Dabam* Leodii *VIII* Junii CIↃIↃCLXXII.

* *Petierat ſc. facultatem Editor, hæc in publicum emittendi.*

2. *Clar.* Hugenius *non aliâ utitur analyſi quam meâ, quæ Parabolam uno tantùm caſu admittit. Quod ut evidentiùs tibi conſtet, æquationem quam conſtruxit hîc adſcribam. Repete memoriâ, ſi placet, quæ ſecundis curis ad te ſcripſi, & invenies, me duas æquationes, problemati per Hyperbolam circa aſymptotos ſolvendo idoneas, aſſignaſſe, has nimirum;*

$$2zbaa - 2znae - qqba + qqn\bar{e} = bzqq - zqqe,$$

Et

$$bzqq - 2znae - qqba + qqne = 2zbee - zqqe;$$

ac ſubjeciſſe, levi mutatione (ſubſtituendo, ex. gr. pro qq, *ejus valorem* aa + ee) *inveniri poſſe infinitas Hyperbolas & Ellipſes, quæ cum circulo dato Problema ſolverent. Nunc in priore ex his æquationibus pro* bzqq *ponatur ejus valor, fiet*

$$zbaa - 2znae - qqba + qqne = bzee - zqqe,$$

Sive

$$aa - \frac{qqa}{z} = ee - \frac{qqe}{b} + \frac{2nae}{b} - \frac{qqne}{zb}.$$

Atque hæc eſt æquatio, quam magno ingenii acumine, ac pari facilitate conſtruxit vir doctiſſimus. Quod ut tibi pluribus probem, opus non eſt, quando labore non multo rem ad calculos revocando id agnoſcere poteris. Vale. Dab. Leodii *X* Junii CIↃIↃCLXXII.

3. *Problematis* Alhazeniani *memoriam dudum objeceram, Vir Cl; ſed literis tuis admonitus temperare mihi non potui, quin faciliorem ejuſdem conſtructionem quærerem. Incidi autem nuper in ſequentem, quâ breviorem cùm dari poſſe vix credam, committere nolui, quin eam judicio ac cenſuræ tuæ ſubmitterem. Sint igitur puncta data E B*, circulus cujus centrum A; junctis E A, B A, ſecantibus circulum in F & C; fiant tres proportionales E A, F A, V A, & tres iterum B A, C A, X A: tum junctâ V X, ac productâ utcunque, (vertice X, latere tranſverſo V X, ac recto ipſi æquali) deſcribatur Hyperbola X P, cujus applicatæ ad diametrum V X G, parallelæ ſint rectæ A B: illa enim ſatisfacit propoſito in caſu ſpeculi convexi, ut ejus oppoſita in caſu concavi. Si aſymptotos deſideres, facilè reperiri poſſunt,*

*V. Fig. III.

productâ VX, donec cum EB, pariter productâ, concurrat in L; deinde biſectâ VX in I, ac ſumtâ LD æquali LI; junctâ enim DI erit aſymptoton una, in quam alia normaliter incidit ad punctum I.

Sed fortaſſe ingratum tibi non erit intelligere, quâ viâ ad hanc conſtructionem pervenerim. Scias itaque, me ex priori mea Analyſi deduxiſſe hoc modo. * *Datis iiſdem quæ priùs, cadat in EB normalis AO, ſitque punctum quæſitum P, ex quo in AO cadat normalis PR. Si AO ſit* b, *EO*, z, *OB*, d, *AP*, q, *PR*, e, *AR*, a; *facile colligitur hæc æquatio*

* V.Fig.IV.

$$\frac{\begin{array}{l}2zdae\\+2bbae\\-2bqqe\end{array}}{zb-bd}+ee=aa\frac{-qqa}{b},$$

quæ mutari poteſt in has;

$$\frac{\begin{array}{l}zdae\\+bbae\\-bqqe\end{array}}{zb-bd}=aa-\tfrac{1}{2}qq\frac{-\frac{1}{2}qqa}{b}.$$

Et

$$\frac{\begin{array}{l}zdae\\+bbae\\-bqqe\end{array}}{zb-bd}+ee=\tfrac{1}{2}qq-\frac{\frac{1}{2}qqa}{b}.$$

Hujus ultimæ conſtructionem olim ad te miſi; alterius verò, Cl. Hugenius. *Primam autem, licèt ſe ſtatim in conſpectum dediſſet; fermè neglexeram, quòd difficilioris conſtructionis eſſe præſumerem. Sed me vano timore deluſum agnovi, cùm in hanc, quam ad te mitto, conſtructionem deſinere nuper ſum expertus. Sit enim, brevioris calculi cauſâ,* $z-d=K$, $zd+bb=bm$; *fiet.*

$$ee-\frac{2qqe+2mae}{k}=aa\frac{-qqa}{b}.$$

Et additis utrinq; $\frac{q^4+mmaa-2qqma}{kk}$, *erit*

$$ee-\frac{2qqe+mae}{k}\;\frac{+q^4+mmaa-2qqma}{kk},$$

hoc eſt, quadratum ex $e-\frac{qq+ma}{k}$, *æquale* $aa\frac{-qqa}{b}\;\frac{+q^4+mmaa-2qqma}{kk}$. *Fiet igitur ἀναλογισμὸς* $kk\,|\,kk+mm\,|\,aa\frac{-kkqqa}{bkk+bmm}-\frac{2qqma+q^4}{kk+mm}\,|$ *& quadratum* $e-\frac{qq+ma}{k}$: *qui ad æquationem faciliorem reduci poteſt, ſi, poſito* $kk+mm=pp$, *fiat* $\frac{ky}{p}=a$; *fit enim tandem, quadratum ex* $e\frac{-qq+my}{k\quad p}=yy-\frac{qqky}{bp}-\frac{2qqmy}{kp}+\frac{q^4}{kk}$; *quam æquationem ſuperiori conſtructioni reſpondere animadvertes, ſi calculos applicueris; ac ſimul obſervabis, ad quamcunque linearum EA, AB, BE, referatur Analyſeos ſumma, eaſdem ſemper haberi poſſe ſectiones, quamvis longiore circuitu & æquationibus valdè diverſis.*

Ex hac conſtructione, κατ' ἀναλογίαν deducere licet alterius Problematis effectionem, cùm ſcil. quæritur punctum, à quo radius reflexus parallelus ſit cuilibet lineæ datæ; ut, ſi dato puncto luminoſo * *B, circulo ex centro A, quæreretur radius reflexus parallelus*

* Vid.Fig.V.

rectæ

recta AE. Idem enim eſt, ac ſi, in alio Problemate, diſtantia punctorum A & E ſupponeretur infinita; quo caſu tertia proportionalis ipſarum EA, FA, abiret in nihilum, & puncta A & V coinciderent: Itaque VX eſſet æqualis AX, & AE parallela PE. Applica igitur ſuperiorem conſtructionem, & Problema abſolves. Deſcriptâ ſcil (vertice X, latere tranſverſo VX, vel AX, & recto ipſi æquali,) Hyperbolâ XP, cujus applicatæ ad diametrum AX, parallelæ ſint rectæ AE. Ἀλλὰ τούτων ἅλις. *Vereor enim, ne ut olim ſilentium meum, ita nunc* φλυαρίαν *ac ſcribendi intemperiem incuſes. Vale itaque, meq; tui obſervantiſſimum amare perge. Dab.* Leodii *XXII* Junii CIↃIↃCLXXII.

Sic ſe habent epiſtolæ *Sluſianæ*, quibus ſubjicienda nunc, quæ eas proximé ſecuta eſt, *Hugenii*, data 1. *Julii*, 1672. *Pariſiis*, in hunc ſenſum;

Volupe mihi erat cognoſcere, quæ mihi nuper ex literis Dn. Sluſii *communicare voluiſti, ipſius nempe Approbationem, nec non doctiſſimas notas de Problematis* Alhaziani *conſtructione. Ecce tibi calculum meum ultimum, à calculo inſignis illius Geometræ differentem, quique nativâ indole ducit ad Conſtructionem illam bonam, quam ante hac ad te miſi. Verum eſt, quin imò mirandum, eam quoque inveniri per calculum quem ipſe de ea inſtituit † poſt mutationem* qq *in* aa + ee; *at hoc videtur fieri caſu, nec ibi apparet Conſtructionis ſimplicitas niſi poſtquam eam peragere ſategimus.*

† *V. ſupra epiſt.* Sluſii *dat.* Jun. 10.

Problema Alhazeni.

Dato Circulo, cujus centrum A, radius AD, & punctis duobus B, C; invenire punctum H in circumferentia circuli dati, unde ductæ HB, HC, faciant ad circumferentiam angulos æquales †.

† V. *Fig.* VI.

Ponatur inventum, ductáque AM recta, quæ bifariam ſecet angulum BAC, ducatur ei perpendicularis HF, itemque BM, CL. Jungatur porrò AH, cui perpend. ſit HE, *rectiſque* BH, HC, *occurrat AM in punctis K, G.*

Sit jam $AM = a$
$MB = b$
$AL = c$
$LC = n$
Radius $AD = d$
$AF = x$
$FH = y$

Quia ergo æquales anguli KHE & CHZ, ſive EHG; eſtque EHA angulus rectus, erit ut KE ad EG, ita KA ad AG. Quia verò BM ad MD, ut HF ad FK, erit,

ut BM + HF ad HF, ita MF ad FK

$b+y$ —— y —— $a-x$ | $\frac{ay-xy}{b+y}$ *add FA* x

fit KA $\frac{ay+bx}{b+y}$

Rurſus, quia CL ad LG, ut HF ad FG, erit permutando & dividendo CL − HF ad HF, ut LF ad FG,

$n-y$ —— y —— $c-x$ —— $cy-xy$, *quâ ablatâ ab AF* $= x$.

fit $GA = \frac{nx-cy}{n-y}$. *Eſt autem* $EA = \frac{dd}{x}$, *quia proportionales FA,*

AH;

AH, *AE*. *Ergo EA*−*GA*, *hoc eſt*, *EG*, $= \frac{dd}{x} - \frac{nx+cy}{n-y}$. *Et KA*−*EA*, *hoc eſt*, *KE* $= \frac{ay+bx}{b+y} - \frac{dd}{x}$.

Sed diximus, quòd KE ad EG, ut KA ad AG

Ergo
$$\frac{ay+bx}{b+y} - \frac{dd}{x} \;\Big|\; \frac{dd}{x} - \frac{nx+cy}{n-y} \;\Big|\; \frac{ay+bx}{b+y} \;\Big|\; \frac{nx-cy}{n-y}.$$

Unde invenitur
$$\begin{aligned} &2anxxy + 2bnx^3 - ddbnx - ddnxy \\ &-2acxyy - 2bcxxy + ddbcy + ddcyy \end{aligned} = \begin{aligned} &naddy + nbddx \\ &- addyy - bddxy. \end{aligned}$$

Et quia $n = \frac{bc}{a}$, *fit* $\frac{2bbc}{a}x^3 - \frac{bbddcx}{a} - \frac{2bbcyyx}{a}$, *quia* $xx = dd - yy$

Eſt autem $\frac{2bbc}{a}x^3 = \frac{2bbcddx}{a} - \frac{2bbcyyx}{a}$, *quia* $xx = dd - yy$

Ergo $\frac{-2bbcxyy}{a} - \frac{ddbcxy}{a} - 2acxyy + ddcyy = -addyy - bddxy$.

Et diviſis omnibus per y *&* *ductis in* a,
$$-2bbcxy - ddbcx - 2aacxy + ddcay = -aaddy - bddax$$
$$abddx - cbddx + acddy + aaddy = 2aacxy + 2bbcxy$$
$$\frac{abddx - cbddx + acddy + aaddy}{2aac + 2bbc} = xy,$$ *quæ æquatio eſt* (*ad hyperbolam*.

Vel quia $bc = na$, $\frac{abdd - anddx + acddy + aaddy}{2aac + 2bbc} = xy$.

Sit $\frac{add}{aa+bb} = p$; *Ergo* $\frac{pbx - pnx + pcy + pay}{2c} = xy$.

* V. *Fig.* 7. *Unde porrò non difficulter invenitur ſequens Conſtructio* * : *Jungantur BA, AC, & applicato ſeorſim ad utramque quadrato radii AD, fiant inde AP, AQ; & juncta PQ, dividatur ipſa bifariam in R, & per punctum R ducantur RD, RN, ſeſe ad rectos angulos ſecantes, quorumque RD ſit parallela AD, quæ dividit bifariam angulum BAC. Erunt jam RD, RN aſymptoti oppoſitarum Hyperbolarum, quarum altera per centrum A tranſire debet, quæque ſecabunt Circumferentiam in punctis H quæſitis. Tranſibunt autem Hyperbolæ per puncta P, G.*

Ratio Conſtructionis apparet, ductis $P\gamma$ *&* $Q\zeta$ *perpendicularibus in AM*: *Fit enim* $A\gamma = \frac{add}{aa+bb}$ *ſive P*; *&* $A\zeta = \frac{ap}{c}$. *Item* $P\gamma = \frac{pn}{c}$ *&* $Q\zeta = \frac{pb}{c}$. *Quare* $AO = \frac{pc+pa}{2c}$, *&* $OR = \frac{pb-pn}{}$ *Unde cætera facilia.*

Hactenus Dn. *Hugenius*. Quibus Dn. *Sluſius* hæc reſcripſit.

Mirari deſine, Vir Clariſſime, eandem in Albazeniano Problemate Conſtructionem ex diverſis Æquationibus deduci, quandoquidem illæ omnes, quibus hactenus uſi ſumus, in una eademque generali Analyſi continentur. Quod ut oſtendam, datus ſit circulus *, *cujus centrum A, puncta H & I; ſitque punctum quæſitum K, ad quod ex punctis I & H ducantur rectæ HK, IK, & Tangens KD. Tum ex A ducatur quælibet AG, occurrens HK in E, IK in B, Tangenti KD in D (iis nim. productis, quas produci eſt opus.) His poſitis evidens eſt, ob angulos EKD, DKB, æquales, & angulum AKD rectum, tres AE, BE, DE fore ſemper harmonicè proportionales. Itaque ductis ad AE normalibus KC, IF, HG, ac denominatis partibus,*

* V. Fig. VIII.

AK. q
AC. a
CK. e
HG. b
AG. d
FA. z
FI. n

habebitur, methodo, quam in ſecunda hujus Problematis analyſi olim adhibui, hæc generalis Æquatio,

$$ndaa\ bzaa\ nqqa+bqaa=ndee\ zbee+2bnaee+2zdae-dqqez\ zqqe$$

Finge nunc, AG eſſe perpendicularem ad HI, nihil varietatis erit in æquatione, niſi quod AF & AG, hoc eſt, d *&* z, *erunt æquales. Poſito itaque* d *pro* z, *fiet*

$$ndaa-bdaa-nqqa+bqqa=ndee-dbee+2bnae+2ddae-2dqqe.$$

Sive applicatis omnibus ad nd − db

$$aa-\frac{qqa}{d}=ee\frac{+2bnae+2ddae-2dqqe}{nd-bd};$$

Eadem nempe, quam ex prima mea Analyſi, licèt aliâ viâ, deduxeram, & quam nuper, modo facili conſtructam, ad te miſi.

Pone deinde, AG coincidere cum AH; abibit igitur HG ſive b *in nihilum. Expunctis itaque ab æquatione partibus, in quibus* b *reperitur, remanebit,* $ndaa-nqqa=ndee+2zdae-dqqe-qqze.$ *Hanc autem, ſi meminiſti, curis ſecundis inveni, & aliam huic ſimilem in caſu quo recta AG tranſire intelligitur per I.*

Supponamus demum, rectam AG ſecare bifariam angulum HAI; erit ob ſimilitudinem triangulorum HAG, IAF, ut HG ad GA, ita IF ad FA, ſive ut b *ad* d, *ita* n *ad* z, *&* $nd=bq$. *Ablatis igitur æqualibus, ſit,* $bqqa-nqqa=2bnae+2zdae-dqqe-qqze$: *Illa ipſa, quam, ut ex literis tuis nuper intellexi, Cl.* Hugenius *conſtruxit.*

Intelligatur tandem eadem recta HG ſecare bifariam rectam HI; erunt igitur æquales HG, IG, hoc eſt, $b=n$; *fietque, ablatis æqualibus,*
$bdaa-bzaa=bdee-bzee+2bbae+2zdae-dqqe-qqze$; *quam, licet non admodùm difficilem, nemo noſtrûm hactenus conſtruxit. Hæ autem, ut & ipſa Generalis æquatio, in duas alias dividi poſſunt, poſito, ut noſti, pro* aa *vel* ee, *ejus valore* qq−ee *vel* qq−aa.

Vides igitur, quicquid hactenus præſtitum eſt, in eandem Analyſin reſolvi; quæ & infinitas alias Conſtructiones per Circulum datum & Hyperbolam complectatur. Sed eas inveſtigare non eſt tanti, cùm in hoc Problemate, ut olim fortaſſis inopiâ, ſic nunc copiâ laboremus. Addam tandem Conſtructionem per Parabolam, *idque via duplici; quæ licèt aliis per* Hyperbolam *operoſior videatur, lineæ tamen ſimplicitate, quâ Parabola inter reliquas ſectiones commendatur, operam compenſat.*

Iiſdem

Iiſdem igitur datis, jungatur* AI, & producatur in S, donec AS fiat æqualis AH, junctáque HS, & biſecta IS in M, ducatur per M recta RMQ normalis ad HS, in quam cadat ex A normalis AQ, & cui parallelus ducatur radius AC. Tum factis tribus proportionalibus IA, A[illegible], AE, fiat ut SA ad AE, ita MQ ad AD, & RS ad AP (in recta AQ verſus Q;) & in eadem ab alia parte ſumatur DO æqualis DC. Demum, biſectâ PD in X, inclinetur per X, angulo ſemi-recto ad AX, recta VXL, occurrens normali in D erectæ in puncto V, & in quam ex O cadat normalis OB Ajo, ſi fiat ut VX ad XB, ita XB ad BL, punctum L eſſe verticem, LV axem, XV latus rectum Parabolæ, quæ Problemati ſatisfacit omni caſu; ſecans nimirum Circulum datum in punctis K, quorum ſupremum & infimum ad Problema Alhazenianum pertinent, reliqua ad aliud, de quo nuper ad te ſcripſi.

* V. Fig. IX.

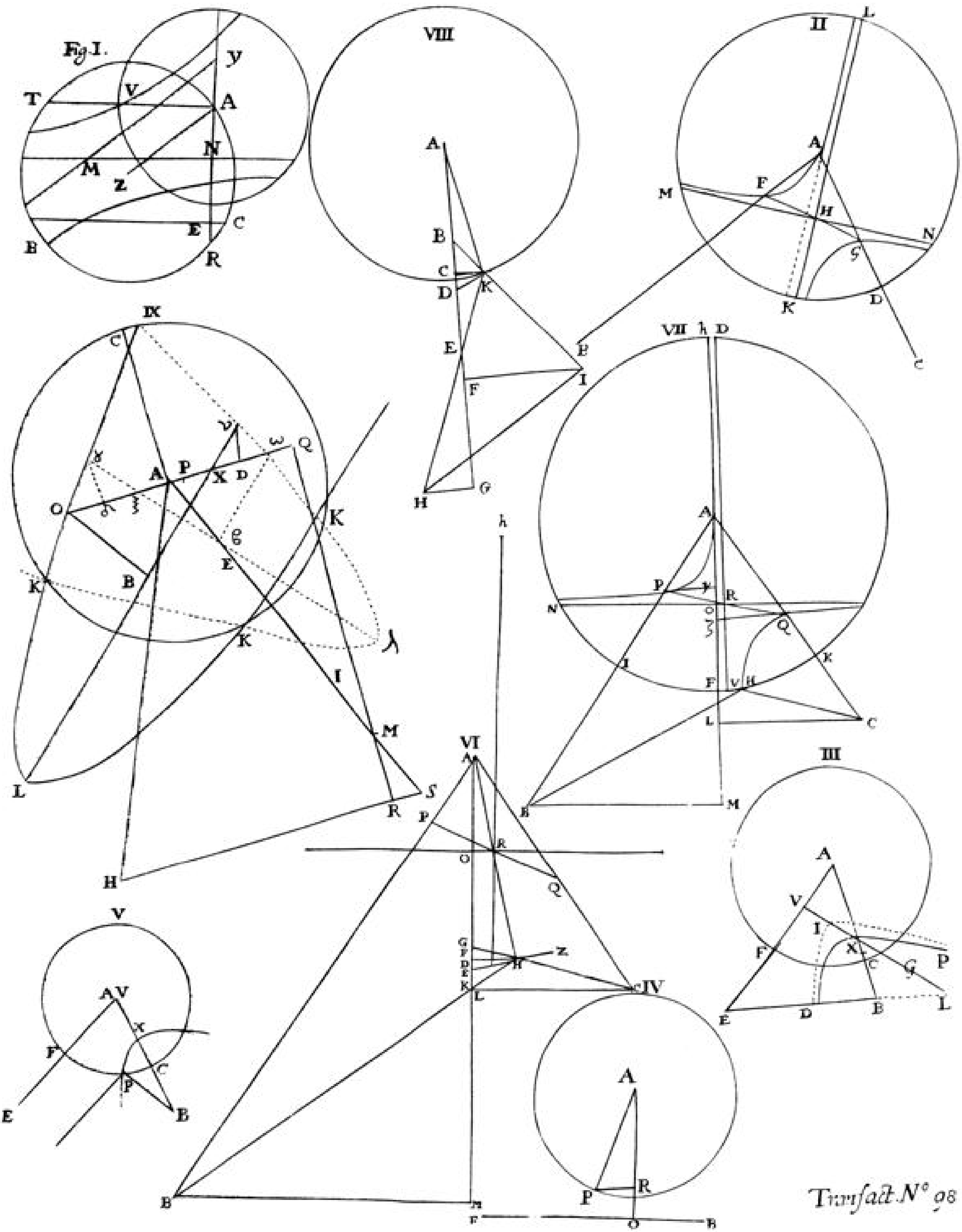
Datur, ut ſupra indicavi, alia quoque Parabola, quæ cum hac paria facit, & cujus deſcriptio ex hac adeò facilè deducitur, ut novâ non ſit opus. Sumatur enim Aδ, in directum DA, & ipſi æqualis, & in directum OA, ipſi quoque æqualis, Aω. Tum biſectâ Pδ in ξ, ducatur per ξ recta ϰξβ, normalis ad XB, concurrens cum δϰ, normali ad OA, in ϰ, & in quam cadat normalis ωβ; ac fiat ut ϰξ ad ξβ, ita hæc ad βλ: Erit λ vertex, λξ axis, ϰξ latus rectum Parabolæ, quæ in iiſdem cum priore punctis Circulum datum ſecabit. Sed de Problemate Alhazeni jam plus quàm ſatis. Vale, &, quo ſoles affectu, tui ſemper obſervantiſſimum porrò proſequi perge. Dab. Leodii prid. Kal. Septemb. CIƆIƆCLXXII.

Epiſtola Doct. Johannis Walliſii, PRIMAM Inventionem & Demonſtrationem Æqualitatis lineæ Curvæ Paraboloïdis cum Recta, anno 1657. factam, Dn. Gulielmo Neile p. m. aſſerens; proximeque Dn. Chriſtophoro Wren Equiti, Inventionem lineæ Rectæ æqualis Cycloidi ejuſque partibus, anno 1658.

Clariſſimo Viro, Henrico Oldenburg; Johannes Wallis S. Octob. 4. 1673. Oxoniæ.

Clariſſime Vir,

QUod ad Rectificationem iſtius Curvæ ſpectat, quam ego Paraboloidem Semi-cubicalem appellare ſoleo; omnino errat Cl Hugenius (pag. 71, 72, Horologii Oſcillatorii) cum ejus inventionem primam tribuit Johanni Heuratio Harlemenſi, Anno 1659. Quippe certum eſt, eandem Biennio prius inveniſſe & demonſtraſſe Guilielmum Nelium Anglum, Equitis Pauli filium: Et, poſt illum, id ipſum demonſtraſſe (ne plures nominem) Honoratiſſimum D. Vice-comitem Brounckerum, & Cl. Wrennium, Anglos; circiter menſes Junii, Juliique, Anni 1657. atque rem jam tum apud noſtros notiſſimam fuiſſe; utpote inter eos (Geometras alioſque,) qui (Societatis Regiæ appellationem nondum adepti, tum ſolebant in Greſhamenſi Collegio (poſt habitas ibidem prælectiones Mathematicas) ſtatis diebus convenire, publicatam & cum plauſ~~a~~u acceptam. Idque mihi literis ſuis, Auguſto ~~mane~~ mense tum ſequente, ad me Oxonium datis, indicavit Honoratiſſimus D. Vice-comes Brounker;



Tranſact. N° 98